

ABSTRACT OF THE DISCLOSURE

A semiconductor device and a method for manufacturing the same and method for deleting information in use of the semiconductor device, in which field shield isolation or a trench type isolation between elements is used with suppression of penetration of field oxide into element active region of the device, that is, a defect involved in conventional LOCOS type process, are disclosed. A non-LOCOS insulating device isolation block is formed in a semiconductor substrate. The non-LOCOS insulating device isolation block uses a field shield element isolation structure or trench type element isolation structure. After gate electrode wiring layers are formed in a field region and an active region to the same level, a pad polysilicon film formed on the entire surface to cover the patterns of these gate electrode wiring layers is polished by chemical mechanical polishing (CMP) using the cap insulating films of the gate electrode wiring layers as stoppers, thereby forming the gate electrode wiring layers into separated patterns. With this arrangement, even when the width of the gate electrode wiring layer is reduced to the exposure limit in photolithography, the pad polysilicon film can be separated and patterned.